

AMENDMENTS TO THE CLAIMS

1. (currently amended) A measuring unit to be removably connected to a blood sample analyzer~~sample analyzer~~, the measuring unit comprising:

a first member having a first channel through which a blood sample~~sample~~ is allowed to pass;

a second member having a second channel through which the blood sample~~sample~~ is allowed to pass; and

first and second electrodes provided in the first and second channels, respectively; and

a partition member having a through-hole through which a blood cell contained in the blood~~the~~ sample is allowed to pass from the first channel to the second channel;

wherein the partition member comprises a base having the through-hole and a projecting portion which projects from the base around the through-hole, and

wherein the base is integral with the projecting portion, and the base and the projecting portion are composed of a resin.

2. (original) A measuring unit as set forth in claim 1, wherein one of the first and second members has a projection, and the projection is fitted in a space surrounded by the projecting portion around the through-hole.

3. (original) A measuring unit as set forth in claim 1, wherein one of the first and second members has a first recess for receiving the partition member.

4. (original) A measuring unit as set forth in claim 1, wherein the projecting portion has a ring shape.

5. (original) A measuring unit as set forth in claim 1, wherein the projecting portion is located on a circle coaxial with the through-hole.

6. (original) A measuring unit as set forth in claim 1, wherein the projecting portion projects axially of the through-hole.

7. (original) A measuring unit as set forth in claim 1, wherein the base has a disk shape.

8. (original) A measuring unit as set forth in claim 7, wherein the through-hole is provided at a center of the base.

9. (original) A measuring unit as set forth in claim 1, wherein the base has a second recess, and the through-hole is provided in the second recess.

10. (original) A measuring unit as set forth in claim 9, wherein the base comprises a front surface and a rear surface, and the projecting portion and the second recess are provided on the front surface.

11. (previously presented) A measuring unit as set forth in claim 1, wherein the base comprises a front surface and a rear surface, and the projecting portion is provided on the front surface,
wherein the partition member further comprises a second projection portion provided on the rear surface.

12. (original) A measuring unit as set forth in claim 1, wherein the base and the projecting portion are integral with each other and composed of a resin.

13. (original) A measuring unit as set forth in claim 1, wherein the first and second channels are partly coaxial with the through-hole.

14. (original) A measuring unit as set forth in claim 1, further comprising first and second electrodes provided in the first and second channels, respectively.

15. (currently amended) A partition member provided in a detector for detecting a signal from a sample, the partition member comprising:

a base having a through-hole through which the sample is allowed to pass; and

a projecting portion which projects from the base around the through-hole,

wherein the base is integral with the projecting portion, and the base and the projecting portion are composed of a resin.

16. (original) A partition member as set forth in claim 15, wherein the projecting portion has a ring shape.

17. (original) A partition member as set forth in claim 16, wherein the projecting portion is located on a circle coaxial with the through-hole.

18. (original) A partition member as set forth in claim 15, wherein the projecting portion projects axially of the through-hole.

19. (original) A partition member as set forth in claim 15, wherein the base has a disk shape.

20. (original) A partition member as set forth in claim 19, wherein the through-hole is provided at a center of the base.

21. (original) A partition member as set forth in claim 15, wherein the base has a recess, and the through-hole is provided in the recess.

22. (original) A partition member as set forth in claim 21, wherein the base comprises a front surface and a rear surface, and the projecting portion and the recess are provided on the front surface.

23. (previously presented) A partition member as set forth in claim 15, wherein the base comprises a front surface and a rear surface, and the projecting portion is provided on the front surface,
the partition member further comprising a second projecting portion provided on the rear surface.

24. (original) A partition member as set forth in claim 15, wherein the base and the projecting portion are integral with each other and composed of a resin.

25. (currently amended) A partition member as set forth in claim 23, wherein the second projecting portion is integral with the base and the projecting portion and composed of the resin.
~~base, the projecting portion and the second projecting portion are integral with each other and composed of a resin.~~

26. (original) A partition member as set forth in claim 15, wherein the projecting portion has a ring shape, and includes a tapered interior wall which has an inner diameter progressively decreasing toward a proximal edge thereof away from a distal edge thereof.

27. (currently amended) A partition member as set forth in claim 23, wherein the second projection portion has a ring shape, and projects from the base.

28. (cancelled)

29. (original) A partition member as set forth in claim 15, wherein the sample is a blood sample.

30. (original) The partition member as set forth in claim 15, wherein the detector comprises a measuring unit to be removably connected to a sample analyzer.

31. (withdrawn) A mold for molding a partition member having a through-hole through which a sample is allowed to pass, the mold comprising:
a male die including a core pin having a shape conformable to the through-hole; and
a female die including a cavity having a shape conformable to the partition member;
wherein the female die further includes a vent extending from the cavity to outside of the female die for degassing the cavity, and the cavity has an inlet of the vent located in opposed relation to the core pin.

32. (withdrawn) A mold as set forth in claim 31, wherein the inlet of the vent has an inner diameter smaller than an outer diameter of the core pin.

33. (withdrawn) A mold as set forth in claim 31, wherein the inlet of the vent is coaxial with the core pin.

34. (withdrawn) A mold as set forth in claim 31, wherein the female die includes a pin embedded in a center of the cavity, and the vent is provided in the pin.

35. (withdrawn) A mold as set forth in claim 31, wherein the female die includes a material channel through which a material for the partition member is injected into the cavity.

36. (withdrawn) A mold as set forth in claim 35,
wherein the material channel includes a sprue which receives the material from the outside of the female die, first and second runners connected to the sprue, and a gate connected to the first and second runners,

wherein the received material is supplied into the cavity from the sprue through the first and second runners and the gate.

37. (withdrawn) A mold as set forth in claim 36, wherein the gate includes a ring-shaped first gate connected to the first and second runners, and a plurality of second gates each connected to the first gate at one end thereof and connected to the cavity at the other end thereof.

38. (withdrawn) A mold as set forth in claim 37, wherein the plurality of second gates are arranged so that the material supplied to the first gate is supplied into the cavity uniformly in different directions.

39. (withdrawn) A mold as set forth in claim 35, wherein the material is a resin.

40. (withdrawn) A mold as set forth in claim 31, wherein the male die includes a projection having a shape conformable to a part of the partition member.

41. (withdrawn) A method for molding a partition member having a through-hole through which a sample is allowed to pass, the method comprising the steps of:

(a) combining a male die including a core pin having a shape conformable to the through-hole and a female die including a cavity having a shape conformable to the partition member:

(b) supplying a fluidized material into the cavity;

(c) solidifying the material in the cavity;

(d) separating the male die and the female die, and unmolding the solidified material;

wherein gas is expelled from the cavity at a position of the female die opposed to the core pin in the step (b).

42. (withdrawn) A method as set forth in claim 41, wherein the material is supplied into the cavity through a plurality of channels in the step (b).

43. (withdrawn) A method as set forth in claim 41, wherein the material is supplied into the cavity uniformly in different directions in the step (b).

44. (withdrawn) A method as set forth in claim 41, wherein the fluidized material is injected into the cavity at a pressure of 50 to 150MPa in the step (b).

45. (withdrawn) A method as set forth in claim 41, wherein the gas is expelled through a vent having a diameter smaller than an outer diameter of the core pin in the gas expelling step.

46. (withdrawn) A method as set forth in claim 41, wherein the steps (a), (b), (c) and (d) are sequentially performed.